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a debridement tip affixed to said distal end of said debridement extension, said debridement tip in fluid communication with both said irrigation path and said suction path, said debridement tip having a plurality of suction apertures in fluid communication with said suction path, and the exterior of said debridement tip, said suction apertures spaced about the periphery of said debridement tip in ninety degree intervals.

21. (New) The debridement extension of Claim 20, wherein said irrigation cannula comprises an inner cannula and said suction cannula comprises an outer cannula surrounding said inner cannula.

REMARKS

Claims 2-9 and 11-21 are pending in the application. Claims 2-9, and 11-17 have been rejected. Claims 1 and 10 are cancelled by the current amendment. Claims 18-21 are added by the current amendment.

Drawings

Applicants acknowledge the Examiner's indication that formal drawings will be required when the application is allowed.

Specification

Applicants have amended paragraph [0022] and the title of the invention to obviate the Examiner's objections to the specification.

Claim Rejections – 35 U.S.C. §102

The Examiner rejected Claims 1-7 and 10-17 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,129,701 (hereinafter Cimino '701). In this regard, the Examiner indicated that Cimino '701 disclosed a debridement extension including external longitudinal flutes 21 and 20.

Applicants respectfully submit that Cimino '701 does not disclose a debridement tip having a plurality of external flutes having a primarily longitudinal orientation as called for in Independent Claims 5, 14, and 16 of the present application. Applicants respectfully submit that items 21 and 20 of Cimino '701 are not external flutes having a primarily longitudinal orientation formed in a debridement tip as called for in Independent Claims 5, 14, and 16, but

rather are first and second passages for suction and irrigation fluid, respectively. See, e.g., U.S. Patent No. 6,129,701, column 7, lines 8-12. Because Cimino '701 does not disclose every element of Independent Claims 5, 14, and 16, Applicants respectfully request that the Examiner withdraw the 35 U.S.C. §102(b) rejection of these claims. Claims 2-4, 6-9, 11-15, and 17 all depend from one of Independent Claims 5, 14, and 16. Therefore, Applicants respectfully request that the Examiner withdraw the 35 U.S.C. §102(b) rejections of Claims 2-4, 6-9, 11-15, and 17 for at least the reasons advanced above with respect to Independent Claims 5, 14, and 16.

Claim Rejections – 35 U.S.C. §103

The Examiner rejected Claims 8-9 under 35 U.S.C. §103 as being unpatentable over Cimino '701 in view of U.S. Patent No. 6,371,934 (hereinafter "Jackson et al. '934"). In this regard, the Examiner indicated that Cimino did not disclose a plurality of irrigation and/or aspiration apertures spaced at nineteen degree intervals and that Jackson disclosed a nineteen degree interval between irrigation apertures. Without conceding that Jackson et al. '934 is prior art to the present application, Applicants respectfully traverse this rejection as indicated below.

Applicants have added Independent Claim 18 which corresponds to dependent Claim 8 as filed rewritten in independent form. Applicants have further added Independent Claim 20 which calls for, inter alia, a plurality of suction apertures spaced about the periphery of the debridement tip in ninety degree intervals. Applying the Examiner's 35 U.S.C. §103 rejection of Claims 8 and 9 to newly added Claims 18 and 20, Applicants respectfully submit that Jackson et al. '934 does not disclose either a plurality of suction apertures or a plurality of irrigation apertures spaced at ninety (90) degree intervals about a debridement tip.

Jackson et al. '934 makes no mention of any interval for the spacing of a plurality of irrigation or suction apertures about a debridement tip as called for in Independent Claims 18 and 20 but rather refers to a nineteen (19) degree angle of convergence for bristles extending from a debridement tip. See U.S. Patent No. 6,371,934, column 4, lines 28-31 ("The bristles preferably converge upwardly at an angle of approximately nineteen degrees (Fig. 6) to terminate in a somewhat rounded bristle tip."). Because neither Cimino '701 nor Jackson et al. '934 discloses or suggests a debridement extension having a debridement tip with a plurality of suction or irrigation apertures spaced about the periphery of the debridement tip

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in ninety degree intervals as called for in Independent Claims 18 and 20, Applicants respectfully request withdrawal of the 35 U.S.C. §103 rejection of the subject matter of Claims 8 and 9 as currently presented in Independent Claims 18 and 20.

In the event Applicants have overlooked the need for an extension of time or payment of fee, Applicants hereby petition therefore and authorize that any charges be made to Deposit Account No. 02-0385, BAKER & DANIELS.

In accordance with 37 C.F.R. §1.121, Applicants herewith submit a marked up copy of the amended portions of the specification and the amended claims.

If any questions concerning this Application should arise, the Examiner is encouraged to telephone the undersigned at 260/424-8000.

Respectfully submitted,



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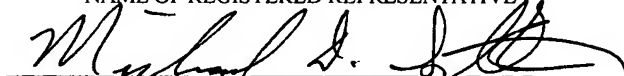
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March 19, 2003
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ATTACHMENT I

Marked-up Version of the Amended Parts of the Specification

Title:

DEBRIDEMENT EXTENSION PROVIDING IRRIGATION AND MECHANICAL
SCRUBBING FOR REMOVAL OF DEAD, DEVITALIZED, OR CONTAMINATED
TISSUE FROM A WOUND.

Paragraph [0022]:

[0022] As illustrated, e.g., in Figure 2, debridement tip 14 includes flutes 40 connecting suction apertures 34 and irrigation apertures 38. Figure 2 illustrates flutes 40 extending from suction apertures 34 to the distal end of debridement tip 14, i.e., the end of debridement tip 14 having axial irrigation aperture 44 formed therein. In an alternative embodiment of the current invention, flutes 40 will span suction apertures 34 and irrigation apertures 38. As illustrated, e.g., in figure \s 2 and 4, annular channel [54] 56 connects suction apertures 34 and flutes 40. Flutes 40 provide a path for irrigation fluid and debris to enter suction apertures 34. Furthermore, flutes 40 provide a texture to effect a scrubbing action when the tip is maneuvered in the wound as further described below.

ATTACHMENT II

Marked-up Version of the Amended Claims

2. (Amended) The debridement extension of Claim [1] 5, wherein said irrigation cannula comprises an inner cannula and said suction cannula comprises an outer cannula surrounding said inner cannula.

3. (Amended) The debridement extension of Claim [1] 5, wherein said debridement tip further includes a plurality of suction apertures in fluid communication with said suction path and the exterior of said debridement tip.

4. (Amended) The debridement extension of Claim [1] 5, wherein said debridement tip is tapered from a proximal end thereof to a distal end thereof.

5. (Amended) [The debridement extension of Claim 1, wherein] A debridement extension having a proximal end and a distal end, the proximal end being adapted for connection to an irrigation source and a suction source, the debridement extension comprising:

a fitting adjacent the proximal end, the fitting including an irrigation port and a suction port;

an irrigation cannula attached to said fitting in fluid communication with said irrigation port, said irrigation cannula defining an irrigation path from said proximal end of the debridement extension to the distal end of the debridement extension;

a suction cannula attached to said fitting in fluid communication with said suction port, said suction cannula defining a suction path from the proximal end of the debridement extension to the distal end of the debridement extension; and

a debridement tip affixed to said distal end of said debridement extension, said debridement tip in fluid communication with both said irrigation path and said suction path, said debridement tip having a plurality of irrigation apertures in fluid communication with said irrigation path, said irrigation apertures spaced about the periphery of said debridement tip, whereby an amount of irrigation fluid in said irrigation path traverses said irrigation apertures and exits the debridement tip, said debridement tip [includes] including a plurality of external longitudinal flutes.

7. (Amended) The debridement extension of Claim [1] 5, further comprising an axial irrigation aperture positioned on a distal end of said debridement tip.

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8. (Amended) The debridement extension of Claim [1] 5, wherein said plurality of irrigation apertures are spaced about the periphery of said debridement tip in ninety degree intervals.

11. (Amended) The debridement extension of Claim [10] 14, wherein said irrigation cannula comprises an inner cannula and said suction cannula comprises an outer cannula surrounding said inner cannula.

12. (Amended) The debridement extension of Claim [10] 14, wherein said debridement tip further includes an irrigation chamber in fluid communication with said irrigation path and having a plurality of irrigation apertures in fluid communication with and spaced about the periphery of said irrigation chamber, whereby an amount of irrigation fluid in said irrigation chamber traverses said irrigation apertures and exits the debridement tip.

13. (Amended) The debridement extension of Claim [10] 14, wherein said debridement tip is tapered from a proximal end thereof to a distal end thereof.

14. (Amended) [The debridement extension of Claim 10, wherein] A debridement extension having a proximal end and a distal end, the proximal end being adapted for connection to an irrigation source and a suction source, the debridement extension comprising:

a fitting adjacent the proximal end, the fitting including an irrigation port and a suction port;

an irrigation cannula attached to said fitting in fluid communication with said irrigation port, said irrigation cannula defining an irrigation path from said proximal end of said debridement extension to said distal end of said debridement extension;

a suction cannula attached to said fitting in fluid communication with said suction port, said suction cannula defining a suction path from the proximal end of the debridement extension to the distal end of the debridement extension; and

a debridement tip affixed to said distal end of said debridement extension, said debridement tip in fluid communication with both said irrigation path and said suction path, said debridement tip having a plurality of suction apertures in fluid communication with said suction path, and the exterior of said debridement tip, said suction apertures spaced about the periphery of said debridement tip, said debridement tip [includes] including a plurality of external longitudinal flutes.